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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/017,089	12/15/2001	Joachim Schulz	TAIG-98	6522

7590 01/28/2004
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EXAMINER

FLORES RUIZ, DELMA R

ART UNIT PAPER NUMBER

2828

DATE MAILED: 01/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/017,089

Applicant(s)

SCHULZ ET AL.

Examiner

Delma R. Flores Ruiz

Art Unit

2828

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.


- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 November 2003.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.


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Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 – 3, 6, 10 – 13 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Anikitchev Sergej (DE 4421600 A1).

Regarding claim 1, Sergej discloses In combination with a coaxial laser resonator, an optical system for reforming the laser (see Figs. 1 and 11) beam generating by the laser resonator from a circular sector shaped beam (see Fig. 1, Character 20, Abstract) cross section into a laser beam with a rectangular beam cross section, said beam issuing from the laser resonator being directed in a beam path through said optical system which includes a mirror (see Fig. 1, Character 24, Abstract) with a reflective surface shaped in the form of a circular sector of a parabolic body (said limitation only recites facts and features that are well known and expected, the same features that essentially result from the use or application of a reflective surface shaped

in the form of a circular sector of a parabolic body , and therefore said limitations are said to be inherently disclosed in the teachings of Sergej).

Regarding claims 2, 12, Sergej discloses a reflective surface is the convex or concave surface of a parabolic rotational body (see Fig. 1, Character 20).

Regarding claim 3, Sergej discloses such parabolic rotational body is in the form of a rotational parabolic (see Figs. 1, and 11).

Regarding claims 6, 13, 15, Sergej discloses a optical system includes optical element interposed in the beam path after the beam has been reformed by said mirror, said optical element (see Fig. 11 Character 24) having at least one surface serving to reform the laser beam in two mutually perpendicular direction and optical element consist of several components (see Figs. 1 and 11).

Regarding claims 10 and 11, Sergej discloses in combination a coaxial laser resonator (see Figs. 1 and 11) with an annular discharge chamber and a circular sector shape (see Fig. 1 Character 20) output opening generating a laser beam with a circular sector shaped beam cross section and a beam forming system providing a beam path therethrough and including a mirror with a reflective surface shaped in the form of a

circular sector of a parabolic rotational body (see Fig. 1, Character 24), said optical system reforming the laser beam into a laser beam with a rectangular beam cross section (see Figs. 1 and 11, Abstract), and circular sector of said parabolic rotational body is coaxially aligned with the circular sector axis (see Fig. 1 Character 30) of the laser beam incident thereon (see Figs. 1 and 11, Abstract).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4 – 5, 7 – 9, 14, and 16 – 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anikitchev Sergej (DE 4421600 A1) in view of Ota et al (5,450434).

Regarding claims 4 – 5, 17 – 18, Sergej discloses the claimed invention except for a filter. It would have been obvious at the time of applicant's invention, to combine Ota's teachings of a filter with laser since filters absorb some of the light that passes through them and therefore, it is known in the art to use a filter in combination with a

laser to select only the desirable component laser beams as an improvement to the system.

Regarding claims 7 – 9, 14, 16, Sergej discloses the claimed invention except for optical element is a lens, (bifocal and cylindrical lens). It would have been obvious at the time of applicant's invention, to combine Ota of teaching a optical element is a lens, (bifocal and cylindrical lens) with laser because it is known in the art to use a lens in combination with a laser to focusing radiation other than light and make up the beam reforming system.

Response to Arguments

Applicant's arguments filed 11/17/2003 have been fully considered but they are not persuasive.

Applicant argues the prior art lacks: in combination a coaxial laser with a beam forming system which must include a mirror whose surface in shaped as the circular sector of a reflective parabolic rotation body. The examiner disagree with the applicant arguments since the prior art does teach in combination a coaxial laser with a beam forming system which must include a mirror whose surface in shaped as the circular sector of a reflective parabolic rotation body (See Figs. 1 and 11, abstract, column 2,

Art Unit: 2828

lines 39 – 68, Column 3, Lines 1 – 68, and Column 4, Lines 1 – 43) as stated in the rejection above. *The claims lack of any structure to produce the recited result.*

JP
1/26/08
Applicant argues the prior art lacks: Anikitchev not disclose a circular mirror of a parabolic rotational body. The examiner disagree with the applicant arguments since the prior art does teach a circular mirror (see Fig. 1 Character 20) this mirror is a convex of a parabolic rotational body (see Fig. 1 Character 24), the parabolic rotational body is a parabolic mirror (Abstract, Column 4, Lines 16 – 43) as stated in the rejection above.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of


Art Unit: 2828

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Delma R. Flores Ruiz whose telephone number is (571) 272-1940. The examiner can normally be reached on M - F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Ip can be reached on (571) -272-1941. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-3431.


Delma R. Flores Ruiz
Examiner
Art Unit 2828


Paul Ip
Supervisor Patent Examiner
Art Unit 2828

DRFR/PI
January 16, 2004
